

IN THE CLAIMS:

1-56. (Canceled).

57. (Currently amended) A retinal stimulation system comprising:

a first light receiver for receipt of an ambient image;

a light processor, coupled to the first light receiver, to provide image-based control based on the ambient image;

a light projector, coupled to the light processor, to provide light output based on the image-based control; and

a ~~second light receiver~~ retinal implant adapted to receive at least the light output.

58. (Previously presented) The retinal stimulation system of claim 57, wherein the light output comprises diffuse infrared light.

59. (Previously presented) The retinal stimulation system of claim 57, wherein the light output comprises ambient image-based infrared light.

60. (Previously presented) The retinal stimulation system of claim 57, wherein the light output comprises ambient image-based visible light.

61. (Currently amended) The retinal stimulation system of claim 57 wherein the ~~second light receiver~~ retinal implant is adapted to receive the ambient image.

62. (Currently amended) The retinal stimulation system of claim 57 wherein the ~~second light receiver~~ retinal implant comprises at least one microphotodiode.

63. (Previously presented) The retinal stimulation system of claim 62 wherein the at least one microphotodiode is adapted to stimulate a retina of an eye.

64. (Previously presented) The retinal stimulation system of claim 57 wherein the light processor is adapted to control at least one of pulsing of the light output, intensity of the light output, duration of the light output and wavelength of the light output.

65. (Previously presented) The retinal stimulation system of claim 57 further including a patient input device connected with the light processor.

66. (Previously presented) The retinal stimulation system of claim 57 further including a pupil tracking device operably connected with the first light receiver to control an orientation of the first light receiver.

67. (Previously presented) The retinal stimulation system of claim 66 wherein the first light receiver comprises a camera.

68. (Previously presented) The retinal stimulation system of claim 57 further comprising a headset to accommodate at least the first light receiver and the light projector.

69. (Previously presented) The retinal stimulation system of claim 68 wherein the headset comprises a glasses-like configuration.

70. (Currently amended) The retinal stimulation system of claim 57 further including an optical element, operatively disposed between the light projector and the retinal implant~~second light receiver~~, having an at least partially reflective surface.

71. (Previously presented) The retinal stimulation system of claim 70 wherein the optical element comprises a substantially completely reflective mirror.

72. (Currently amended) A retinal stimulation system comprising:
a headset;
a first light receiver coupled with the headset for receipt of an ambient image;
a light processor, coupled to the first light receiver, to provide image-based control based on the ambient image; and
a light projector, coupled to the light processor and headset, to provide light output based on the image-based control and configured to control operation of a retinal implant.

73. (Currently amended) The retinal stimulation system of claim 72 further comprising a ~~second light receiver~~ the retinal implant adapted to receive at least the light output from the ~~headset light projector~~.

74. (Currently amended) The retinal stimulation system of claim 73 wherein the ~~second light receiver~~ retinal implant comprises a microphotodiode.

75.(Previously presented) The retinal stimulation system of claim 74 wherein the microphotodiode is adapted to stimulate a retina of an eye.

76. (Previously presented) The retinal stimulation system of claim 72 further including a pupil tracking device operably connected with the first light receiver to control an orientation of the first light receiver.

77. (Previously presented) The retinal stimulation system of claim 72 wherein the headset comprises a glasses-like configuration.